

## **SURVEY OF WASHINGTON DRY BEAN PRODUCTION**

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Dry beans are grown in Washington as a seed crop, a bulk commodity grain crop and a direct market grain crop. In 2002, we surveyed dry bean farmers in Washington to better understand farmers' perceptions regarding dry bean production, storage and marketing in the region. This paper presents a few of our findings from this survey.

### **Materials and Methods**

We developed a simple questionnaire with 13 questions pertaining to dry bean production, storage and marketing. The questionnaire was distributed to 124 farmers by mail, and follow up was conducted by email (30) and telephone interviews (88). The distribution list for the questionnaire included names of dry bean farmers provided by extension agents, the Washington organic farmer list, Farmers Market managers and respondent farmers who referred us to other farmers who grew dry beans.

### **Results and Discussion**

Obtaining names of large-scale dry bean farmers was very difficult. Dry bean contracting companies did not give out names of their contract farmers and extension agents did not have lists for their counties. There are no dry bean meetings in the state where we could make contact with dry bean farmers. More work is needed to locate addresses of large-scale dry bean farmers in Washington. We were able, however, to locate a good number of commercial small-scale farmers through the organic farming list and farmers markets.

Of the 124 farmers we attempted to contact, only 46 farmers responded (37%). Factors that contributed to the low response rate included: farmers were no longer living at listed addresses; and farmers' listed telephone numbers had changed. Telephone interviews produced the greatest number of responses essentially because we made repeated calls to each farmer, and we conducted the interview at his or her convenience.

The 46 respondents were from 18 counties in Washington. In 2001, Washington Ag. Statistics reported 315 large-scale dry bean farmers located in 4 counties in eastern Washington. In our survey, 11 (24%) respondents were located in eastern Washington and 9 of these were large-scale farmers (Table 1). The remaining 37 (80%) respondents were small-scale farmers, and 29 (63%) were in western Washington. This survey did not adequately capture the large-scale dry bean producers in the state, however the survey did show that small-scale farmers are currently growing dry beans in western Washington.

Of the respondents, 21 (46%) were female. In some households, the husband and wife farmed together, and in these cases we based 'respondent farmer gender' on the gender of the primary person who responded to the questions. In our survey, all large-scale respondents were male whereas only half of the small-scale respondents were male. These results imply that females actively participate in small-scale farming and do not participate in large-scale farming.

**Table 1.** Gender and geographic distribution of farmers in Washington who responded to our dry bean production questionnaire in 2002.

| Respondent Farmers   | Regions   |           |               |               |       | Total  |
|----------------------|-----------|-----------|---------------|---------------|-------|--------|
|                      | Northwest | Southwest | North Central | South Central | East  |        |
| Female               | 14        | 3         | 2             | 2             | 0     | 21     |
| Male                 | 11        | 1         | 1             | 1             | 11    | 25     |
| Total                | 25        | 4         | 3             | 3             | 11    | 46     |
| % Respondent Farmers | 54        | 9         | 6.5           | 6.5           | 24    | 100    |
| Large : Small*       | 0 : 25    | 0 : 4     | 0 : 3         | 0 : 3         | 9 : 2 | 9 : 37 |

\* Number of large-scale farmers : Number of small-scale farmers

The 46 respondent farmers grew a total of 69 varieties of dry beans. Large-scale respondents grew on average 2 varieties of dry beans each year and pinto, red kidney and small red beans were the primary types of dry beans that they grew. Small-scale respondents grew 1-20 varieties of dry beans each year, 4 varieties on average per respondent, and there were no dominant types of dry beans grown by small-scale respondents. Total dry bean production area for each large-scale respondent was 18-450 acres, and 155 acres on average. Total dry bean production area for each small-scale respondent was a minimum of 10-row feet and a maximum of 1¼ acres, and 0.13 acres on average. All small-scale respondents operated commercial farms and sold or bartered their dry bean crop.

All 9 large-scale respondents produced dry beans on contract for seed-supplying companies and harvested beans were transported back to the company for storage and marketing. Of the small-scale respondents, 3 did not store beans and 34 stored their beans on-farm for 1 to 6 years for their own consumption or for direct marketing purposes. The most common small-scale on-farm storage techniques were sacks and glass jars.

Of the respondents, 24 purchased dry bean seed each year, 10 saved seed from their crop, 1 bartered seed, 7 purchased and saved seed, and 4 purchased, saved and bartered seed. Of the small-scale respondents, 8 did not save seed, 24 saved seed for 1-3 years and 5 saved seed for more than 3 years. Of the large-scale respondents, 8 did not save seed and 1 saved seed for up to 5 years.

Regardless of the scale of production, most of the respondents (31 or 67%) did not observe any disease problems in their dry bean crop and felt that they have had healthy crops in the past. The remaining 15 farmers observed disease symptoms such as mold, seedling wilt, brown leaf spot, pod rot and anthracnose. Symptoms of Beet Curly Top Virus and Bean Yellow Mosaic Virus were observed by 4 farmers. Most of the small-scale bean farmers were organic growers and did not use any chemical pest control measures. Respondents rated weeds as the number one problem in dry bean production (26%), followed by poor germination (22%), late maturity (20%), diseases (20%) and shriveled beans (13%). There was no correlation between saving seed and poor seed germination. Some respondents also reported that inadequate tools for small-scale dry bean threshing was a major constraint to increasing dry bean production.